



**BEHAVIOUR  
CHANGE  
INTERVENTIONS  
IN PRACTICE**

**Maintaining use of OurFish app,  
there's more to catch than  
counting fish.**

**Local implementer**

Rare



Funded by:



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# Catalyst project pilots: behaviour change interventions in practice

The Academy of Change is an evidence-based capacity building programme on sustainable behaviour change, designed for leaders working on climate change and sustainability engagement within the NGO sector. The Catalyst programme built upon this by accelerating the integration and use of sustainable behaviour change know-how within NGOs at the organisation level. Participation in the Catalyst was by invitation only, with the opportunity granted to NGO representatives that had successfully concluded the Academy of Change Capacity Building Programme and held the potential to drive organisational change within their NGOs.

The Catalyst programme of tailor-made tools, support for designing interventions and NGO peer exchange concluded with the opportunity for participants to put forward their ideas for pilot projects. The three selected projects received funding and bespoke support from the Academy of Change team to design, implement and evaluate a behaviour change intervention in their organisation.

This series of reports shares the journeys of the pilot projects, through gathering insights and designing their intervention, to evaluating the resulting behaviour change outcomes and impacts. The reports have been written by the pilot projects themselves, in the hope that this can inspire and provide useful learnings for others looking to implement behaviour change projects in their own organisations.

## The pilot projects:

- 1.** Increasing e-bike commuting in “BIKEmode: From cars to e-bikes”, with **CEED Bulgaria**
- 2.** Supporting communities to collect fishing data in “Maintaining OurFish app use”, with **Rare**
- 3.** Gamifying water use reductions with students in “Game of Showers: encouraging students to save water”, with **Hespul**

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***"I am particularly excited about the opportunity to make scientific data more accessible to the people we work with as this is one of the cornerstones of our program goal: sustainable, community-led, small-scale fisheries management."***

– Claudia Quintanilla, Rare

# OurFish app, there's more to catch than counting fish



Image of OurFish App on Social Media

## Partner

Rare

## Location

Global

## Date

October 2020 –  
September 2021

## 1. The need for an intervention

Small-scale fisheries employ 90% of fishers globally (50 million fishers), provide 50% of global catch and the estimated value of their unreported catch is \$10.7 billion USD/year<sup>1,2</sup>. Traditional fisheries data collection methods are resource intensive making data on fish stock scarce. Therefore, despite their ecological, social, and economic importance we are limited in our ability to make data-driven decisions to sustainably manage small-scale fisheries. This lack of data undermines the decisions of households that depend on coastal resources, community-based fisheries management groups and government agencies that direct public policy and funding.

In 2019, Rare launched OurFish, an app that records and aggregates the volume of marine or coastal species bought and uses the data as a proxy to total catch avoiding the need for costly surveys at docks and dispersed fish landing sites.

Rare teams observed that OurFish app use dropped-off after about 2 months without consistent support from staff or partners, making it a resource intensive program activity.

Hence, when discussions about version 3 of the app started in 2020, we saw an opportunity to apply behaviour theory to improve the rate of adoption of OurFish v.3.

## 2. Context in which the intervention took place

Data for decision-making is one of eight elements of the [Fish Forever program](#) – therefore, the implementation of the intervention was a collaborative effort between our US-based and country offices, without which this pilot would not have been possible to implement.

The core working group consisted of 22 people across 8 teams:

- **Indonesia:** Hari Kushardanto, Emilio de la Rosa, Raymond Jakub, Stuart Campbell, Wahid Suherfian, Haris Setiawan, Agus Setiawan, Nursyam Dwi Vrandi
- **Philippines:** Fel Ceasar Cadiz, Dean Apistar, Jovenal Edquilag
- **Mesoamerican Reef (MAR):** Cristhian Perez, Gabriela Polo
- **Mozambique:** Bruno Barreto, Nelson Capaina

<sup>1</sup> Catch reconstructions reveal that global marine fisheries catches are higher than reported and declining, source: [Nature Communications](#)

<sup>2</sup> Fighting air pollution: there are more cars in Sofia than the average for the EU's largest cities, source: [European public health alliance](#)

## OurFish app, there's more to catch than counting fish

- **Brazil:** Mayra Nascimento, Maura Sousa
- **Hub for Collaboration and Learning:** Sam Nervez, Michelle Pascual
- **Science and Technology:** Courtney Cox, George Stoyle
- **Center for Behavior & the Environment (BE.Center):** Katie Williamson

In addition, contributions were made by Erik Thulin (BE.Center), Kate Schweigart and Michael Hofmann (Innovative Finance).

Each country team was represented by subject matter experts in both data for decision-making, and behaviour adoption.

The Philippines, Indonesia, and Honduras country teams participated actively in qualitative research collection and analysis. The Mozambique and Brazil teams participated in the prototyping, testing, and launching stages. The resources developed through this intervention will be integrated into our global library of implementation resources and used consistently as we expand our program's reach.

### 3. Aims of the intervention

Our goal was for buyers of marine/coastal species in communities where we work to record their purchases and sales consistently and correctly in the OurFish app.

### 4. Target audience and stakeholders

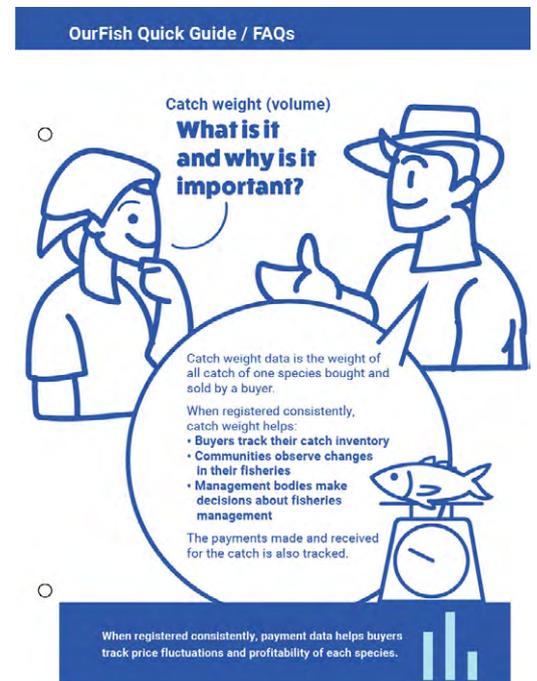
Our main target audience was 143 registered users of OurFish app. They are usually the first buyer along the fisheries value chain that live in rural coastal communities and are part of the informal economy. Buyers typically use paper records with varying degrees of formality or not at all to record their sales – hence the importance of keeping records is not necessarily readily recognized. Qualitative research revealed that due to buyers' low to medium digital technology literacy, their children usually support them in registering data into the app – therefore we designed prototypes that would appeal to them too.

An additional audience we targeted are the people that regularly support buyers in the adoption of the OurFish app. Depending on the capacity within each country team, they may be Rare staff, government and non-governmental partners. With travel restrictions due to COVID straining their ability to reach buyers in ways that are familiar and accessible, the need to create different support resources was even higher.

### 5. Target behaviour(s) and behaviour change tools used

The consistent and correct use of OurFish requires buyers to complete the following micro-behaviours at different times and locations:

- Registering details of the fish they buy and sell
- Registering details of the supplies they buy, sell or donate
- Register details of the loans they provide and are given
- Regularly upload OurFish data to cloud-based data management system



Graphic: Intervention Package

## OurFish app, there's more to catch than counting fish



Graphic: Intervention Package

Rare's **behavior levers** framework was used to design the interventions most relevant to the target audience.

A summary of the key strategies used and how they were applied follows.

**Emotional Appeals:** Key messages directed to diverse stakeholders were crafted to tap into the pride of using OurFish consistently and correctly or, when appropriate, support its use and dissemination.

The messages were embedded in both the OurFish community event and Ambassador Package described below.

### Social Influences and Information

An **OurFish community event** was designed for OurFish buyers and their families to learn or refresh their knowledge on OurFish, its benefits and how to use it.

The event starts with a "Day in the Life" of our family activity used to elevate individual roles in the family unit, reflect on the importance of fisheries for the household and to later plan how members of the family will work together to use OurFish app.

In addition, the closing includes a public pledge for all participants to express their commitment to use the app and an opportunity to take fun pictures that can be shared on social media. The OurFish community event plan serves as a guide for training managers and/or OurFish leads in each country to design events that respond to the specific needs of their context. This resource was co-created by Sam Nervez (lead), Michelle Pascual and Claudia Quintanilla.

**Information and Choice Architecture:** a highly visual OurFish Ambassador package was created with minimal text using an engaging, informal tone. The main user of the package are local "ambassadors" that can provide regular, frequent, and personalized support to OurFish users. This type of support was identified by buyers as one of the most important influences to start and maintain the use of the app.

The need to increase the efficacy of a local network of support was intensified due to Rare's staff inability to travel to sites due to the COVID-19 pandemic.

## OurFish app, there's more to catch than counting fish

The Ambassador package includes a wide range of information for each team to customize depending on their specific context needs. Its content is organized into the following sections:

- **Frequently Asked Questions (FAQs) and Troubleshooting Tips**
- **Step-by-step instructions for:**
  - Basic functions
  - Register buying fish
  - Register selling fish
  - Register unsold fish
  - Manage supplies
- **Definitions and importance of catch weight and balance summary**
- **Ideas on Motivating and Celebrating OurFish Users**
- **Key Messages for Diverse Audiences: buyers, kids and fishers**
- **Visit Scheduler**

This resource was co-created by Claudia Quintanilla (lead), Michelle Pascual (lead), Fel Ceasar Cadiz, Jovenal Edquilag, Eric Guitierrez (creative consultant), George Stoye, Kate Schweigart and Michael Hofmann.

In addition, an [OurFish Campaign User Journey](#) was developed to provide Rare teams a blueprint to design comprehensive campaigns for the adoption of OurFish. The user journey is anchored in the insights drawn from the initial research conducted by teams and makes intentional connections between the insights, campaign experiences, the desired result on the buyers' thoughts, feelings and behaviours. The tool also guides the planning of operational details of campaign design, implementation, and monitoring.

This resource was co-created by Claudia Quintanilla (lead), Michelle Pascual and Katie Williamson.

## 6. Intervention process

The pilot kicked-off in October 2020 with a meeting to review the proposal, resource commitments, methodology, and timeline to members of the working group.

Once teams assessed their capacity to participate we followed Rare's eight-step [behavior-centered design \(BCD\)](#) process to better understand the audiences' needs, design and launch our behaviour adoption interventions.

The following graphic summarizes the pilot's key milestones.

Oct 14, 2020

**Kick-off Meeting**

Oct 29, 2020

**Kick-off Meeting**

Nov – Jan, 2020

**Conducted field research**

Dec 03, 2020

**Reviewed preliminary research data**

Feb 2, 2021

**Reviewed and prioritized insights, ideated solutions**

March 11, 2021

**Prototyped prioritized solutions**

May 19, 2021

**Reviewed first drafts of priority solutions**

June, 2021

**OurFish app V.3 finalized**

July – August, 2021

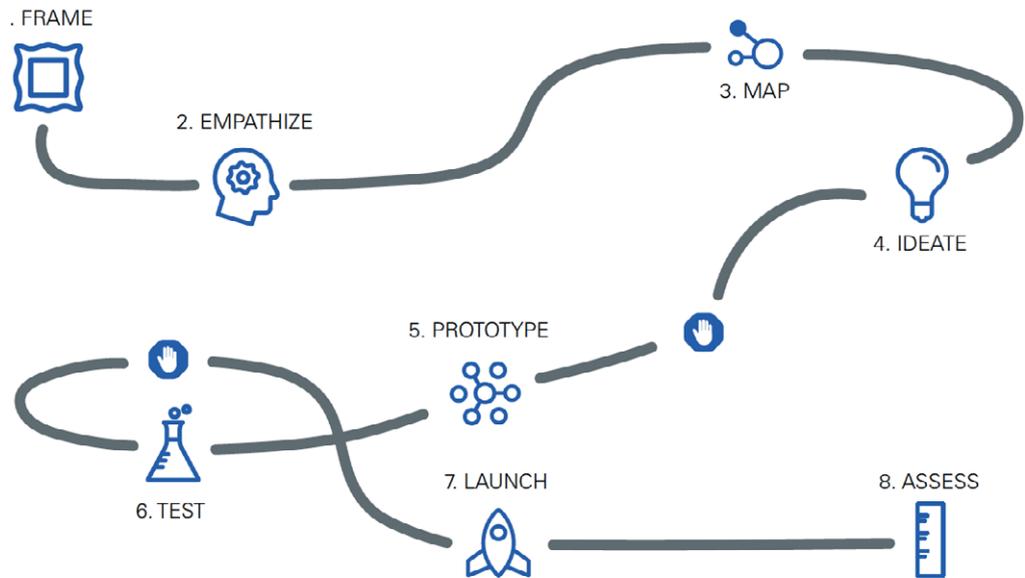
**Tested solutions with users & integrated feedback**

September, 2021

**Integrated solutions in OurFish app launch plans**

Graphic: Intervention plan

**OurFish app, there's more to catch than counting fish**



Graphic: Behavior-Centered Design (BCD)

Highlights from each BCD step are detailed in the following section.

**Frame**

The location of the intervention and target group were determined by our on-going work. Key discussions that took place at this stage focused on:

- Differentiating between the need to understand motivations and barriers to start using and maintaining use of the OurFish app.
- Defining “regular” or “consistent” use.
- Determining if there could be characteristics of buyers (i.e. gender, age) that influence their adoption of the behaviour.

**Empathize**

A [standard interview guide](#) was developed to assess the motivations and barriers that buyers had in the past to start and continue to use the OurFish app.

Buyers selected as interviewees were those that country teams had better access to given COVID-19 travel restrictions and technology at buyers communities; and those with whom they have a closer relationship.

Teams recorded individual responses in a [collective space](#).

Responses were clustered to identify trends using an audience empathy map (what do they see, do, say, and feel in relation to the desired behaviour) and a table that summarized and named themes across countries for motivations and barriers to start using and continue to use the OurFish app.

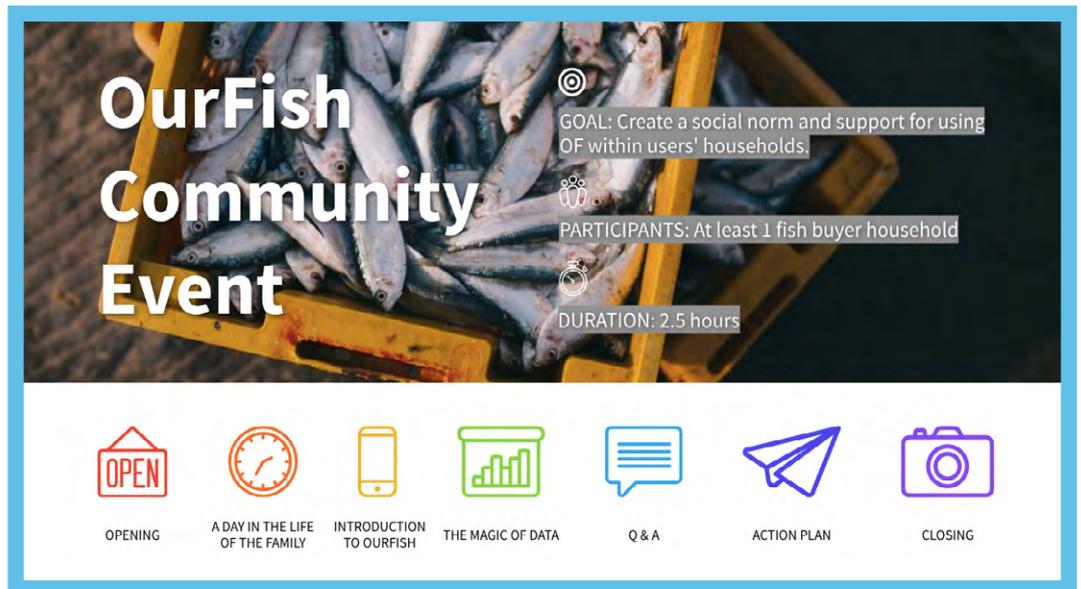
**Map**

Insights about the audience’s internal states were drawn from the themes that emerged from the empathize step. An [insights summary table](#) organized them by behaviour lever to guide the ideation of potential behaviour adoption strategies. At this stage, a meeting with the working group was organized to validate trends, themes, and insights.

**Ideate**

Having validated the insights, the group moved to prioritizing ideation questions generated based on each key insight. The top four choices the group brainstormed ideas for were:

- How might we make it easier to use the app when catch volume is high?
- How might we leverage key influencers?
- How might we establish a peer support structure/network?
- How might we provide regular and frequent support and reminders via other people and/or channels?



Graphic: Interactive overview of the OURFISH community event

An ideation summary derived from the above exercise surfaced that Choice Architecture, Information and Social Influences were the three behaviour levers most likely to influence consistent and correct use of the OurFish app, with Emotional Appeals playing an important supportive role.

### Prototype

Based on the Ideation Summary six potential solutions were proposed to the working group, who voted on their top choices. The top three solutions chosen were a community/family event, an information package for OurFish “ambassadors” and an automated message support system.

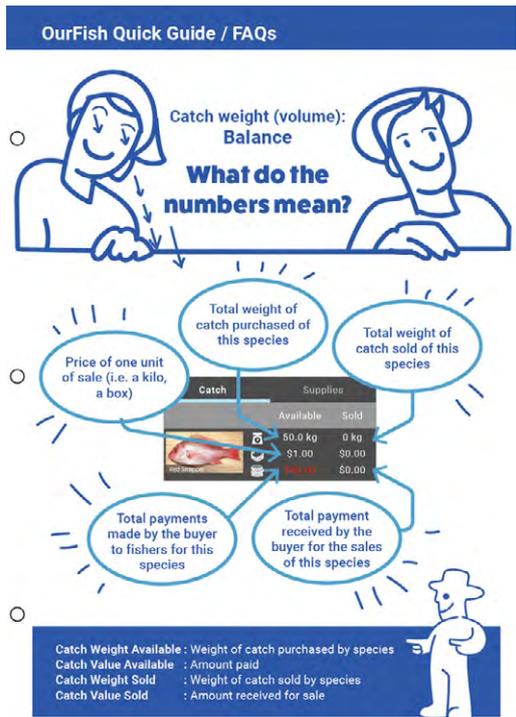
A prototyping session was conducted to identify the prioritized ideas essential features, its global and adaptive elements. Storyboards were also created to illustrate the user’s experience for each one.

After discussions with the Science & Technology team, it was decided not to move forward with the automated message support system due to budget and time constraints to implement it into the app.

Insights collected from Rare’s teams and buyers throughout the prototyping process and the resulting modifications to the early prototypes are summarized below:

- Several barriers to adopt OurFish were related to digital literacy, not the app itself. Consequently, we added a step-by-step to place the app’s shortcut on the phone’s main screen and an FAQ question on how to clear caches.
- In many cases, fish trading is considered a family business and children play an important role in supporting their parents use the OurFish app. Therefore, we developed key messages and activities targeting all members of the household.
- A smartphone is a shared family resource, as a result, sometimes it is used for entertainment preventing the buyer from registering their transactions. This highlighted the importance of positioning the use of OurFish as a behaviour that benefited the household.
- Rewarding the number of transactions a buyer was registering on OurFish could be misleading, instead our messages and activities should focus on the importance of registering data consistently and accurately.

**OurFish app, there's more to catch than counting fish**



Graphic: Intervention Package

**Test**

For the OurFish Ambassador package a mock-up was developed using screenshots from OurFish app version 2. To date, the Mesoamerican Reef (MAR) and Indonesia teams tested the mock-up with two audiences: implementing partners and buyers. The key takeaways of this stage and further modifications to the ambassador package design are detailed in the following list:

- The package is helpful and easy to understand
- The visuals, tone and size are appropriate
- Key messages for different audiences on why using OurFish are useful to both partners and buyers
- Buyers would like to have a copy of certain sections of the package (i.e. step-by-step, key messages) therefore the design was adapted in such a way that teams can print sections independently
- Various content additions/edits, i.e. explanations to main and fisher screen icons, table of content, clearer "flow" of payment options.

The Philippines team is currently undergoing testing of the OurFish Ambassador package and feedback will be incorporated as feasible in its final version.

The OurFish Campaign User Journey and Community Event guide were tested with Rare staff, given they are the primary users of both resources.

They were rated positively with suggestions for improvement that were easily incorporated in their design, such as adding a vision statement at the end of the user journey and clarifying how to connect the "Day in the Life" activity with the closing.

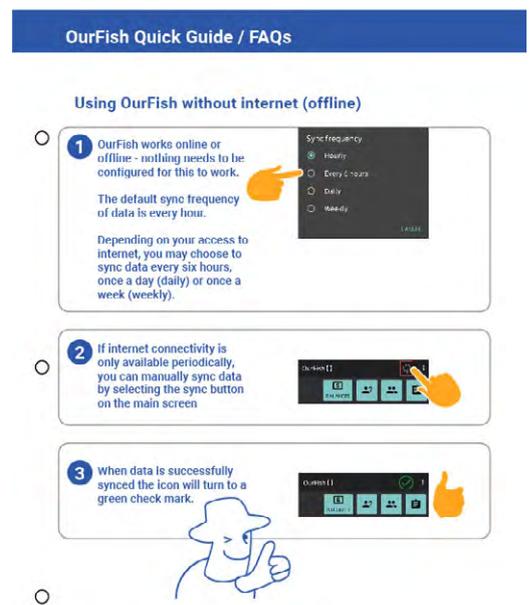
**Launch**

Teams are currently finalizing their OurFish v.3 launch plans, anticipated for late September.

**7. Evaluation**

We will evaluate the success of the behaviour adoption strategies by comparing the number of data entries per user now and when the previous version of the app was released in 2019.

Our challenges during the implementation of the pilot were the impacts of two hurricanes in communities where we work in Honduras, COVID-related travel restrictions that limited our teams' ability to conduct site visits to interview buyers and delays in the development of the app, originally foreseen for April 2021. Due to the highly visual nature of the OurFish Ambassador package, we finalized its content until we had the definite app screenshots and instructions mid-June.



Graphic: OurFish App Instructions

## 8. Outcomes and learnings

Each stage of the the Behavior-Centered Design (BCD) process surfaced unique learnings that shaped subsequent steps.

### Frame

Aligning on how different team members interpreted "consistent" use of OurFish app required considerable discussion and it was also a difficult concept to explain to buyers during interviews in the Empathize step.

### Empathize

Surfaced unexpected barriers around digital literacy and the role of family, as well as characterized the nature of support needed as motivation to start and maintain use of OurFish to be frequent, regular and personalized. This step also clarified specific functions of the OurFish app that were most valuable to buyers.

### Map

It has consistently been one of the most challenging steps in the BCD process, "translating" observations to insights on how the audience feels and what they think made them more relatable, which contributed to ideating more meaningful intervention ideas.

### Ideate

Analysing the results of individual brainstorming exercises facilitated the identification of synergies between ideas and pointed to a more comprehensive intervention strategy.

### Prototype

Designing a prototype as a gradual, iterative process was very effective. Constituting cross-functional teams and with members from diverse countries was critical to surface insights such as the need to de-emphasize the quantity of transactions registered in OurFish. Groups benefited from having diverse "anchors" for their creative process, such as specific research observations, key insights, hypothesis and goal of the intervention.

Crafting questions, based on insights, to identify the prototypes' essential features accelerated and focused group discussions. In retrospect, having a list of audiences and corresponding key messages at this stage in the process, rather than later, could have been beneficial to both enhance the quality of the prototypes and "pre-test" the relevance and usability of the messages in different contexts.

### Test

It revealed that while the OF Ambassador package was not designed for buyers to use independently, they found portions of it to be a helpful reference document. Adding this "sub-product" of the OurFish Ambassador package into the mix of interventions could enhance the program's rate of disseminating the OurFish app.

### Launch

Due to nature of the Fish Forever program and how interventions are rolled out, launch surfaced our own staff's motivations and barriers to use the resources created, which range from the accessibility and usability of graphic design programs to how to connect strategic tools, like the Campaign User Journey, to the operational tools that Program Implementation Managers use to guide their activities at each site.

At a higher level the pilot experience provided valuable insights on how to structure and evolve cross-functional collaboration, determining who is critical at which parts of the process and to what level of intensity throughout; as well as, how to create a rhythm of iterative design that facilitates zooming in and out of levels of detail and the validation of insights and assumptions at critical junctures.

## Imprint

**The Academy of Change** is a non-profit initiative of the **Collaborating Centre on Sustainable Consumption and Production (CSCP)**, **Behaviour Change** and the International **Civil Society Centre (ICSC)**, funded by the **KR Foundation**.

You can find more information on the initiative on its website <http://aochange.org>

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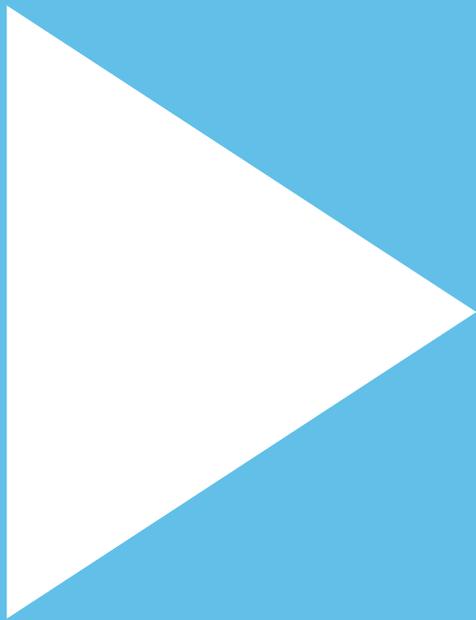
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